

Distributed Generation Interconnection

COMES NOW, MidAmerican Energy Company (“MidAmerican”) and hereby submits its comments in response to the Distributed Generation Interconnection Draft Documents Rulemaking (“DG Interconnection”) distributed by the Illinois Commerce (“Commission”) Staff on December 19, 2003. MidAmerican responds in these comments to the draft Interconnection of Distributed Generation Equipment to Electric Utility Distribution Systems procedures (“DG Procedures”); the draft Agreement for Interconnection and Parallel Operation of Distributed Generation (“DG Agreement”); and the two draft application forms marked Appendix B and Appendix C attached to the Commission’s December 19, 2003 DG Interconnection materials (“DG Applications”).

MidAmerican is an electric and natural gas public utility providing electric transmission service, wholesale electric service, and bundled electric distribution service over facilities that it owns and operates in the state of Illinois as well as in Iowa and South Dakota. MidAmerican is also subject to various Federal requirements for interconnection of certain generators. MidAmerican is subject to the jurisdiction of the Commission and will be subject to any standardized distributed generator interconnection

procedures or agreements that may be adopted by the Commission as a result of this proceeding.

Executive Summary

MidAmerican commends the Staff for its efforts in developing the DG Interconnection materials. MidAmerican asks the Commission to consider its comments concerning the draft documents when developing the next set of documents which will be discussed in the workshop process. MidAmerican offers the following comments concerning the DG Procedures, DG Agreement and DG Application.

1. General

MidAmerican believes that developing standardized DG Procedures, DG Agreement and DG Application will be beneficial to market participants who currently experience difficulty in obtaining an interconnection to utility systems. Equitable and balanced DG Procedures and DG Agreements will enable more consistent and easier negotiations between customers installing DG and utilities. However, standardized DG Procedures and DG Agreements are significant documents that will have an effect on many costs and procedures, and will impact market participants and customers for many years to come. Therefore, MidAmerican believes the Commission should consider a number of factors in proposing standardized DG Procedures and DG Agreements.

MidAmerican is supportive of the workshop process the Commission intends to utilize to develop final DG Procedures and DG Agreements. MidAmerican believes that

a workshop process is well suited to negotiating business process issues and agreement language. MidAmerican encourages the Commission to not use the workshop process to develop technical interconnection requirements. Through MidAmerican's participation in a number of State and Federal generator interconnection process activities and through MidAmerican's active participation on several industry committees responsible for developing consensus technical standards, it is clear that technical requirements used by utilities are tailored to match their unique distribution system design, operational and maintenance practices. In the final analysis, each utility has an obligation to provide safe and reliable electric service to all of its customers. Compromising safety and reliability in the interest of standardization is not acceptable and should be avoided. Therefore, MidAmerican encourages the Commission to utilize the workshop process to focus on procedures and agreements, not on technical requirements.

2. Role of Federal Regulatory Entities

The role of Federal regulatory authorities is important. MidAmerican is subject to Federal Energy Regulatory Commission ("FERC") jurisdiction and is thus bound to follow FERC rules and orders where FERC has jurisdiction. MidAmerican notes that FERC issued a Notice of Proposed Rulemaking regarding Standardization of Small Generator Interconnection Agreements and Procedures ("Small Gen NOPR") on July 24, 2003. In the Small Gen NOPR, FERC delineated generator interconnections as FERC jurisdictional as being those interconnections which connect to FERC- jurisdictional transmission facilities and/or result in FERC-jurisdictional sales of power for resale in interstate commerce. MidAmerican agrees with FERC's delineation but it is important to

note that the final FERC order has not yet been issued. Thus, any DG Procedures or DG Agreements promulgated by the Commission should coordinate with the final FERC order.

MidAmerican also believes that any DG Procedures and/or DG Agreements adopted by the Commission should include clear and explainable definitions of the roles of State and Federal authorities. For example, would a small qualifying facility that has entered into a net billing arrangement with a host utility need to comply with the Commission's procedures or with FERC's procedures or both? What if, pursuant to a net billing arrangement, a small generator nets a portion of its output and sells the remainder to the host utility? It would appear that the FERC, in its order issued March 28, 2001 in Docket No. EL99-3, indicated that net billing arrangements are not sales. In its comments filed in response to the Small Gen NOPR, MidAmerican asked FERC to answer these questions. MidAmerican suggests that the final Commission order take FERC's response into account.

MidAmerican will also be subject to any mandatory reliability organizations empowered by Congress to monitor utilities' compliance with reliability standards. To the extent that any Federal organization has the responsibility to monitor DG interconnections in order to determine compliance with reliability standards, the Commission's procedures should coordinate with such Federal entities.

3. Reasonable Procedural Expectations are Needed

The interconnection of a small generator should not disrupt or in any way diminish the provision of safe and reliable electric service to MidAmerican's other

customers. MidAmerican believes that there is considerable diversity across the state, and even within individual utility systems, as to how distribution is configured. Each utility must be allowed adequate time and resources to properly study or otherwise consider the effects of a small generator interconnection to the utility system.

MidAmerican expects that small generators will advocate an expedited interconnection process that would require a jurisdictional utility to make certain presumptions and ignore the potential impacts of the specifically requested interconnection on the electric system. While MidAmerican recognizes that there are certain situations in which small generators will have negligible impacts to the electric distribution system, caution is warranted. The result of incorrectly chosen parameters in developing the screening rules will be increased likelihood of the interconnection causing safety and/or reliability issues to other customers.

4. Cost Subsidies Should be Avoided

MidAmerican believes that cost-causation principles should apply. All of the costs incurred to interconnect a generator should be borne by the customer requesting that interconnection. A Commission rule requiring a utility to pay for such interconnections would supersede the ability of states to set retail rates following well-established cost causation principles. The rules should permit utilities to directly assign costs to the small generator associated with the interconnection process.

5. Applicability

At present, the DG Procedures presume that each DG interconnection, regardless of the nature of the intended use of the facility by the customer, will be covered under the DG Procedures. Consider, however, the following potential uses for a generator installation:

- A. A customer installs a stand-by diesel generator for the purpose of providing on-site power in the event of an outage of the utility supply. Such generator is never operated in electrical parallel with the utility system and such use can be verified by the customer installing a “break-before-make” isolation switch.
- B. A customer as in example A above who installs generation for a similar purpose but who installs a “fast-transfer” scheme in which the generation is operated in parallel with the utility system for a maximum of 0.1 seconds during the transfer. A customer would choose this type of switch to enable testing of the generator serving its load without requiring an outage and/or to enable to customer to return to the utility system following a utility outage condition.
- C. A customer as in example A above who installs a less expensive transfer switch which allows the generator to be in electrical parallel for several seconds or even minutes before breaking away. Such systems are often manual transfer schemes in which a human must take several actions in order to make electrical parallel and then break away from either the generator or the load.
- D. A customer who installs a 50 kW wind generator under a utility’s Qualifying Facility tariff for the purpose of offsetting its own load and selling the excess back to the utility at the “avoided cost” rate.

- E. A customer who installs a 1 MW generator in order to curtail its net load under a utility demand response program. Such generator is operated in continuous parallel with the utility system but is prevented from continuously exporting power and energy into the utility's system by protective relaying devices.
- F. A customer who installs a 1 MW renewable-fueled generator (such as a methane-fired engine at a landfill) in order to participate under the Illinois Qualified Solid Waste Energy Producer program. Such generator is operated in continuous parallel with the utility system and is NOT prevented from continuously exporting power and energy into the utility's system by protective relaying devices.
- G. A customer who installs a 1 MW generator and intends to sell the output in the wholesale market place. Such generator is operated in continuous parallel with the utility system and is NOT prevented from continuously exporting power and energy into the utility's system by protective relaying devices.

MidAmerican does not believe that the DG Procedures, DG Agreement or DG Applications proposed by the Commission should apply in Examples A, B, C, E or G above. MidAmerican believes that examples A, B, C and E are routinely administered under existing utility processes and that Example G is FERC-jurisdictional. In MidAmerican's case, Examples A and B require only a verification of the operating nature of the facility. There is no need for application forms, complicated interconnection procedures or contracts. In MidAmerican's case, Examples C and E require only a verification either that there is sufficient load at the customer's location to make islanding unlikely or a verification that there is sufficient load on the circuit feeding

the customer to make islanding unlikely. Again, no complicated procedures or contracts are necessary. Thus, MidAmerican believes that only Examples D and F, above, should be covered by the Commission's proposed DG Procedures and DG Agreement.

MidAmerican urges the Commission to define the criteria under which the documents apply. MidAmerican also urges the Commission to not "fix" what isn't broken. In many cases, the implementation of the proposed documents will only slow down and complicate a process that is already working quite well.

Detailed Comments

In the attached, MidAmerican has utilized the "Track Changes" feature in Word to identify specific changes that MidAmerican recommends be made to the DG Procedures and the DG Application. MidAmerican has not made specific comments on the DG Agreement at this time. MidAmerican expects that the DG Agreement will likely be significantly modified to coordinate with the final form of the DG Procedures and thus reserves the right to comment on such DG Agreement at a later date and/or through the workshop process.